

Amendments To The Claims:

Please amend the claims as shown.

1 – 14 (canceled)

15. (new) A stationary gas turbine for power generation, comprising:
an injection apparatus for injecting a liquid into an air stream that is sucked in by a compressor;
a fuel mixed with the air stream and combusted in a combustion chamber to form a hot gas which expands as it flows through a downstream turbine part; and
a temperature-measuring device for recording a temperature of the air stream,
wherein the temperature-measuring device is arranged upstream of the injection apparatus, and the temperature of the air stream at an inlet of the compressor is calculated by the measured temperature.

16. (new) The gas turbine as claimed in claim 15, wherein the humidity of the air stream is determined upstream of the injection apparatus by an air-humidity-measuring device.

17. (new) The gas turbine as claimed in claim 15, wherein the temperature is calculated by a function based on temperature and humidity distributions.

18. (new) The gas turbine as claimed in claim 15, wherein the temperature and humidity distributions can be predetermined in the form of diagrams.

19. (new) A temperature-measuring device for recording a temperature of the air stream upstream of a compressor of a stationary gas turbine, comprising an injection apparatus arranged downstream of the temperature measuring device for injecting a liquid into the air stream that can be sucked in by the compressor, wherein the temperature of the air stream at the inlet of the compressor is calculated by a measured temperature.

20. (new) A control arrangement for controlling the hot-gas temperature of a hot gas in a stationary gas turbine, comprising:

an injection apparatus for injecting a liquid into an air stream that can be sucked in by a compressor;

a fuel that is combusted in a downstream combustion chamber to form the hot gas that expands as it flows through a downstream turbine part; and

a temperature-measuring device that records the temperature of the air stream upstream of the compressor with the hot-gas temperature being controlled by a quantity of the fuel,

wherein the temperature-measuring device is arranged upstream of the injection apparatus and the temperature of the air stream at the inlet of the compressor is calculated by the measured temperature.

21. (new) The control arrangement as claimed in claim 20, wherein the hot-gas temperature is recorded at an outlet of the turbine part.

22. (new) The control arrangement as claimed in claim 20, characterized in that the humidity of the air stream can be determined upstream of the injection apparatus by an air-humidity-measuring device.

23. (new) The control arrangement as claimed in claim 20, wherein the temperature is determined at a minimum possible temperature at which it is assumed there is sufficient evaporation for a 100% air humidity to be present at the inlet of the compressor.

24. (new) The control arrangement as claimed in claim 20, wherein the temperature is calculated taking into account the evaporation of the injected liquid in the air stream.

25. (new) The control arrangement as claimed in claim 20, wherein the quantity of liquid injected into the air stream is altered as a function of the evaporation.

26. (new) The control arrangement as claimed in claims 20, wherein the liquid is distilled water.

27. (new) The control arrangement as claimed in claim 20, wherein the temperature is calculated by a function on the basis of temperature and humidity distributions.

28. (new) The control arrangement as claimed in claim 27, wherein the functions can be predetermined in the form of diagrams.